

REMARKS

The Office Action dated January 3, 2005 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto. Claim 1 has been amended to more particularly point out and distinctly claim the subject matter of the invention. No new matter has been added and no new issues are raised which require further consideration or search.

Claims 1-7 are currently pending in the application. However, claims 4-7 have been withdrawn from consideration. Therefore, claims 1-3 are respectfully submitted for consideration.

In the Office Action, claims 1-3 were rejected under 35 U.S.C. §102(e) as being anticipated by Zednik (U.S. Patent No. 6,089,022). The rejection is respectfully traversed, and Applicants respectfully submit that the presently pending claims recite subject matter that is neither disclosed nor suggested in Zednik.

Claim 1, upon which claims 2 and 3 are dependent, is directed to an LNG carrier for transporting LNG from one location to another. The LNG carrier includes a vaporizer onboard for vaporizing the LNG to a gaseous state. At least one heat exchanger is at least partially submerged in water, and an intermediate fluid circulates between the vaporizer and the heat exchanger. At least one pump is provided for circulating the intermediate fluid. The heat exchanger is configured to heat the intermediate fluid.

As a result of the claimed configuration, a self-contained LNG carrier is provided wherein liquid natural gas can be regasified either onshore or offshore, at each location at

which LNG may be delivered. As will be discussed below, Applicants respectfully submit that Zednik fails to disclose or suggest the claimed invention, and therefore fails to provide the critical and unobvious advantages which are discussed above.

Zednik discloses that LNG is pumped by submerged pump 18 from tank 16 through line 20 and is delivered to a booster pump 21. Booster pump 21 raises the pressure of the LNG before it is passed to vaporizer 25 through line 22. Vaporizer 25 uses sea water as a heat exchange medium to vaporize the LNG into natural gas before it is flowed to shore through transfer line 13 and submerged pipeline 14 (Zednik, Column 4, lines 33-41). An inlet 40 of vaporizer 25 may be fluidly connected to sea chest 50 which is positioned below the waterline to collect sea water therein (Zednik, Column 5, lines 29-31).

Applicants respectfully submit that Zednik fails to disclose or suggest all of the elements of claim 1. Specifically, Zednik fails to disclose or suggest an at least partially submerged heat exchanger for heating an intermediate fluid, as recited in claim 1. According to an embodiment of the claimed invention, an intermediate fluid, such as glycol or fresh water, is circulated by pump 22 through the submerged or partially submerged heat exchanger 21 and then the vaporizer 23. The heat exchanger 21 enables heat transfer from the surrounding sea water to the circulated intermediate fluid due to the temperature differential between the two. The intermediate fluid then circulates to the vaporizer 23. LNG is passed into the vaporizer 23 through line 24, where it is regasified and exits through line 25 (Specification, Paragraph 0041).

The Official Action seems to take the position that the sea chest disclosed in Zednik corresponds to the heat exchanger of the present invention. Applicants respectfully disagree. The sea chest utilized in Zednik is merely a sea water collection container, and a source of sea water to the inlet 40 (Zednik, Column 5, lines 29-31). Zednik does not disclose that the sea chest 50 serves to heat an intermediate fluid, as recited by the present claims. No heat exchange of any type occurs in the sea chest 50. Thus, Applicants respectfully submit that Zednik fails to disclose or suggest an at least partially submerged heat exchanger for heating an intermediate fluid.

In addition, Applicants respectfully submit that Zednik fails to disclose or suggest an intermediate fluid circulating between the vaporizer and the heat exchanger, as recited in claim 1. Applicants respectfully assert that the sea water disclosed in Zednik as heating the LNG does not correspond to the intermediate fluid of the claimed invention. As discussed above, according to an embodiment of the claimed invention, the heat exchanger 21 allows the sea water to heat the circulating intermediate fluid which is then sent to the vaporizer 23. Therefore, according to one aspect of the present invention, the intermediate fluid is a fluid other than sea water which is used in the regasification process. As such, Applicants respectfully assert that Zednik fails to disclose or suggest such an intermediate fluid.

For at least the reasons discussed above, Applicants respectfully submit that it would have been clear to a person of ordinary skill in the art that Zednik does not disclose or suggest at least one heat exchanger at least partially submerged in water and

configured to heat an intermediate fluid, nor does Zednik disclose or suggest an intermediate fluid circulating between the vaporizer and the heat exchanger.

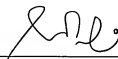
Applicants note that claims 2 and 3 are dependent upon claim 1. Therefore, claims 2 and 3 should also be allowed for at least their dependence upon claim 1, and for the specific limitations recited therein.

In view of the above, Applicants respectfully but strongly submit that each of claims 1-3 recite subject matter that is neither disclosed nor suggested in Zednik. Applicants submit that the subject matter is more than sufficient to render the claimed invention unobvious and unanticipated to a person of ordinary skill in the art. Applicants therefore respectfully request that all of claims 1-3 be found allowable, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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